IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

Plaintiff,

V.

SAMSUNG ELECTRONICS CO., LTD. and SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants.

SAMSUNG ELECTRONICS AMERICA, SAMS

MEMORANDUM OPINION AND ORDER

Before the Court is Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.'s ("Samsung") Renewed Motion for Judgment as a Matter of Law Pursuant to Federal Rule of Civil Procedure 50(b) of Invalidity of the Asserted Claims (the "Motion"). (Dkt. No. 265.) In the Motion, Samsung moves for judgment as a matter of law ("JMOL") that claims 1, 3, 6, and 8 of U.S. Patent No. RE46,679 (the "'679 Patent"). Having considered the Motion, and for the reasons stated herein, the Court finds that the Motion should be **DENIED**.

I. BACKGROUND

At trial, Evolved contended that Samsung infringed claims 1, 3, 6, and 8 of the '679 Patent ("the Asserted Claims"), and Samsung asserted that claims 1, 3, 6, and 8 of the '679 Patent were invalid as lacking sufficient written description under 35 U.S.C. § 112 and as being anticipated or obvious under 35 U.S.C. §§ 102 and 103, respectively. The jury found that claims 1, 3, 6, and 8 were both not infringed and not invalid.

II. LEGAL STANDARDS

A. Judgment as a Matter of Law

"Judgment as a matter of law is proper when 'a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." *Abraham v. Alpha Chi Omega*, 708 F.3d 614, 620 (5th Cir. 2013) (quoting Fed. R. Civ. P. 50(a)). The non-moving party must identify "substantial evidence" to support its positions. *TGIP*, *Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 569 (E.D. Tex. 2007). "Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363 (Fed. Cir. 2004).

"The Fifth Circuit views all evidence in a light most favorable to the verdict and will reverse a jury's verdict only if the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion." *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018) (citing *Bagby Elevator Co. v. Schindler Elevator Corp.*, 609 F.3d 768, 773 (5th Cir. 2010)). A court must "resolve all conflicting evidence in favor of [the verdict] and refrain from weighing the evidence or making credibility determinations." *Gomez v. St. Jude Med. Daig. Div. Inc.*, 442 F.3d 919, 937–38 (5th Cir. 2006).

III. DISCUSSION

Samsung moves for JMOL that claims 1, 3, 6, and 8 of the '679 Patent are invalid. (Dkt. No. 265.) Samsung contends that it proved by clear and convincing evidence that the Asserted Claims are invalid as lacking sufficient written description under 35 U.S.C. § 112 and invalid as being anticipated or obvious under 35 U.S.C. §§ 102 and 103. The Court addresses each in turn.

A. Written Description

Samsung argues that the '679 Patent and its priority applications lack sufficient written description for the following terms: (1) "the received preamble information is . . . a dedicated preamble"; and (2) "index of the dedicated preamble." (Dkt. No. 265 at 1.)

1. "Dedicated Preamble"

First, Samsung argues that there is no written description support for the term: "the received preamble information is . . . a dedicated preamble." According to Samsung, this claim requires a network/base station to send the full dedicated preamble to the terminal (*i.e.*, a mobile device). (*Id.* at 5.) Samsung cites testimony of Mr. Jones, Evolved's infringement expert, agreeing with this interpretation. (*Id.*; Dkt. No. 286 at 303:2-21 ("Q: And so would you agree with me that what's claimed in 6g are two options--you could either send the entire preamble, which is the long number, from the base station to the hand phone—that's option one . . . ? A: Yeah, I agree with that."))

Samsung contends that it is undisputed that the words "dedicated preamble" do not appear in the specification, which Mr. Jones admitted during the trial. (Dkt. No. 265 at 5.) Samsung also argues that Mr. Jones "clearly and unequivocally admitted that the '679 patent specification did not disclose the claimed requirement that the base station sends a full dedicated preamble." (*Id.*) Samsung cites the following testimony by Mr. Jones to support this assertion:

Q. And, sir, when you looked at the patent specification of the '674 Patent [sic] to understand what's being described, you understood that to a person of ordinary skill in the art they would not understand the patent specification to disclose an embodiment where the target base station sends to the source base station just a dedicated preamble and then the source base station sends the dedicated preamble to the phone. Correct?

A. That's right. I thought it was very inefficient.

. . . .

Q. It is your opinion that a person of ordinary skill in the art would not understand this '679 Patent specification to disclose an embodiment where the target base

station sends to the source base station the full dedicated preamble and then the source base station sends the dedicated preamble to the phone. Correct?

A. Correct. And as I answered, my interpretation of the specification is that I don't really think it is disclosed in the sense it makes no sense to me.¹

(Dkt. No. 286 at 306:17-307:9.) Samsung argues that this is a clear admission not only that the limitation did not make sense to Mr. Jones, but that the limitation was not disclosed from the perspective of a person of ordinary skill in the art. (Dkt. No. 265 at 6.)

Samsung also argues that Dr. Mahon, Samsung's invalidity expert, explained why there is no written description support for a base station sending a full dedicated preamble to a mobile device. (*Id.*) Specifically, According to Samsung, Dr. Mahon agreed with Mr. Jones that "Option 1" (i.e., a dedicated preamble) was not disclosed. (Dkt. No. 290 at 64:15-65:19 ("Q. Do you agree with Mr. Jones' assessment regarding option one whether it's present or not in the Korean application or the corresponding U.S. application? A. Based on my analysis and, quite frankly, I have the same opinion of what a person of ordinary skill in the art would expect, I did not find that in the original Korean application."))

Samsung next notes that Dr. Laneman, Evolved's invalidity expert, did not repudiate Mr. Jones's testimony in any way. (Dkt. No. 265 at 7.) Samsung acknowledges that Dr. Laneman presented evidence that the '373 patent specification—the parent to the '679 Patent with a shared specification—contained adequate written description of the Asserted Claims. Specifically, Samsung admits that Dr. Laneman testified that the "dedicated preamble" elements were described in sections of the specification discussing handover "information" of the signature and preamble.

¹ The quote above reflects Mr. Jones's full and complete answer to the question posed. Samsung quotes this testimony twice, once in its Motion and once in its reply brief. Both times Samsung omits everything that Mr. Jones says after the word "Correct." There was no objection made during the trial that the bracketed text was non-responsive to the question. The jury was not instructed to disregard Mr. Jones's full and complete answer. In its briefs, Samsung does not use ellipses, brackets, or any other method to indicate that there was more to Mr. Jones's answer than what it presents in its brief. Additionally, Samsung offers no explanation as to why it chose to cut off Mr. Jones's answer when attempting to show that Mr. Jones made a "clear and unequivocal" admission.

(Dkt. No. 292 at 7:19-9:5); JTX-4 at 6:66-7:7. Dr. Laneman testified that a POSITA would understand the "information" in these sections to support the "dedicated preamble" limitations. (Dkt. No. 265 at 7; Dkt. No. 292, 7:19-9:5.) Despite admitting that this testimony was presented to the jury, Samsung argues that there is zero evidence to support Dr. Laneman's conclusion because the sections of the specification that he cites only describe sending information *about* the signature and preamble, not the signature or preamble themselves. (Dkt. No. 265 at 8.) Samsung argues that "Dr. Laneman's unsupported and conclusory testimony cannot overcome the unequivocal and reasoned admissions from Mr. Jones and testimony of Dr. Mahon that there is no written description support in the specification for the claimed limitation." (*Id.* at 9.)

In response, Evolved first argues that Samsung—and its expert Dr. Mahon—applied the incorrect legal standard for a written description analysis. (Dkt. No. 271 at 4.) Specifically, Evolved argues that Samsung bears the burden of proving lack of written description by clear and convincing evidence. As such, it was incorrect for Dr. Mahon to say that Dr. Laneman failed to "point me to where in the original application I can see the support, find the support." (*Id.*; Dkt. No. 290 at 74:15–19.) According to Evolved, the burden was not on Dr. Laneman to show that there was written description support, but on Dr. Mahon to show that there was a lack of written description support. The Court agrees.

Next, Evolved argues that Samsung failed to challenge Evolved's evidence regarding written description support in the '373 Patent at trial. (Dkt. No. 271 at 4.) Evolved contends that Samsung's evidence and argument at trial concerning written description focused solely on Korean Application No. 10-2006-0063135 (JTX-2) (the "Korean Application"), the earliest application to which the '679 Patent claims priority. (*Id.*) However, it is not the only priority application. Evolved notes that it was undisputed that the specifications of the '679 Patent, the '373 Patent, and United

States Patent No. 8,219,097 (the patent from which the '679 Patent reissued) all contained the same precise specification, and it was undisputed that the '679 Patent is entitled to the priority date of at least the '373 Patent.

Evolved argues that Dr. Laneman provided unrebutted testimony that "the specification of the Korean application is not as extensive as the patent specifications." (*Id.* at 5.) Despite this, Evolved notes that Dr. Mahon's did not refer to the specification of the '679 Patent, the '097 Patent, or the '373 Patent a single time. (*Id.*) Since Dr. Laneman testified that the applications are not coextensive, a concept that Evolved contends was unchallenged, Evolved argues that Samsung cannot establish the necessary link between Dr. Mahon's opinions regarding the Korean application and the specifications of the U.S. Patents. (*Id.* at 5; Dkt. No. 290 at 315:23–316:4.)

Evolved contends that Dr. Laneman's testimony provided a sufficient basis for the jury to find that the '373 Patent provided adequate written description support for the claims. Specifically, Dr. Laneman testified as follows:

- Q. Doctor Laneman, can you describe for us what portion of the '373 we're looking at here?
- A. So this is in the specification, and it's describing part of the handover process.
- Q. And what does this portion of the specification tell you about the receipt of those elements you described previously as being part of the written description?
- A. It's describing the disclosure that the source eNodeB, that's the base station that the mobile device is currently connected to, receives the handover confirm message for the UE from the target base station.
- Q. And does that mean that each of the elements that you described are received?
- A. Yes, received by the source base station.
- Q. Can you describe for us what's contained in the second sentence of this passage?
- A. The source -- and, again, in the description of the process, the source eNodeB sends a handover command message to the mobile device, and that's received by

the mobile device, and that contains information of the signature and the preamble which are used for access by the mobile device.

Q. And so when it describes the information could that be either a dedicated preamble or an index?

A. Yes.

Q. Based on this description, do you find that there is adequate description of the receipt of both dedicated preamble and the index of the dedicated preamble?

A. Yes.

(Dkt. No. 292 at 7:19–9:5); JTX-4 at 6:66–7:7. Evolved argues that Samsung did not rebut Dr. Laneman's testimony concerning the disclosure in the '373 Patent. (*Id.*)

Evolved also argues that Dr. Laneman identified sufficient disclosure in the Korean Application to support the disputed terms. (Dkt. No. 271 at 6.) Accordingly, Evolved argues that no reasonable juror could have found that Samsung met its clear and convincing burden to prove invalidity due to lack of written description. (*Id.*)

Evolved disagrees that Mr. Jones admitted that the '679 Patent does not contain sufficient written description. (*Id.* at 7.) First, Mr. Jones is Evolved's infringement expert, and Evolved contends that he never opined or was asked to opine on any issues regarding validity. (*Id.*) Second, Evolved contends that Samsung's excerpts of Mr. Jones's trial testimony pertain to Mr. Jones's opinions about the efficiency of a claimed embodiment, not about the sufficiency of the written description. (*Id.*) Evolved points out that when Samsung counsel invited Mr. Jones to take a definite position that a "dedicated preamble" was not disclosed in the patent specification, Mr. Jones declined the invitation:

Q. Right. To you what's described in option one in the claims is inefficient. Correct?

A. It's inefficient from a downlink perspective, yes.

Q. Right. And can you explain to the jury why option one is inefficient and you didn't find it in the patent specification?

A. Well, you've asked me two separate questions.

(Dkt. No. 286 at 308:11–17.) Evolved contends that Mr. Jones never opined on whether "option one" (*i.e.*, a network transmitting a dedicated preamble) was disclosed in the specification, but only gave his opinion that such would be inefficient. Regardless, Evolved argues that Mr. Jones's comments, however interpreted, do not justify overturning a jury's verdict that was based on consideration of the testimony of Evolved's actual validity expert, Dr. Laneman.

In reply, Samsung contends that Dr. Mahon did in fact testify that his opinion applied to the '679 Patent specification (which has the same specification as the '373 Patent) as well as the Korean Application:

Q. So were you asked to analyze this Korean application *as well as the U.S. application* to see whether the language about sending a dedicated preamble from the base station to the phone was actually disclosed to those skilled in the art in those earlier applications?

A. Yes, I did.

(Dkt. No. 290 at 27:8-13 (emphasis added)).

Q. So just to remind the jury, what do[] both you and Mr. Jones say about option 1, whether that's disclosed in the Korean application or the corresponding U.S. application?

A. We both agree that it's not disclosed in the original applications.

(*Id.* at 153:20-24 (emphasis added)). Samsung further argues that Evolved does not point to any evidence of material differences between the '679 patent specification and the Korean Application.

In sur-reply Evolved disagrees that there is no evidence of material differences between the '679 Patent specification and the Korean Application. Specifically, it notes that Dr. Laneman testified that "the specification in the Korean Application is not as extensive as the [U.S.] patent specifications." (Dkt. No. 280 at 2-3 (citing Dkt. No. 290 at 315:23–316:4.))

The Court agrees with Evolved. As a preliminary matter, Evolved is correct that the burden is on Samsung to prove that the '679 Patent lacks written description. The Court is not persuaded that it was legally inappropriate for Dr. Mahon to have opined that he did not find any written description support based upon his review of the relevant specifications. He also stated that Dr. Laneman could not "point [him] to where in the original application" there was written description support. Dr. Mahon testified that he had reviewed the relevant specifications and he opined that there was no written description support. However, Evolved rebutted this by providing affirmative evidence through Dr. Laneman, showing where he believed there was support for written description. Samsung challenged Dr. Laneman's opinions through the rebuttal and pre-buttal testimony of Dr. Mahon. The Court is not persuaded that this was an impermissible application of the law or improperly shifting the burden. The Court also notes that Evolved made no objection to this testimony during trial.

The evidence from trial record supports the jury's finding that Samsung did not meet its clear and convincing burden to show that the '679 Patent and its priority applications lack written description support for the "dedicated preamble" limitations. Dr. Mahon specifically opined that he had reviewed both the Korean Application and the U.S. Patents that supported the '679 Patent, and he opined that they all lacked sufficient written description for the "dedicated preamble" limitation. (Dkt. No. 290 at 27:8-13.)However, the Court agrees with Evolved that the primary focus of Dr. Mahon's written description analysis focused on the Korean Application.

Dr. Laneman on the other hand testified that "the specification in the Korean Application is not as extensive as the [U.S.] patent specifications." (Dkt. No. 290 at 315:23–316:4.) Dr. Laneman then pointed the jury to specific sections of the '373 Patent specification and presented his analysis for what he considered to be the support for a "dedicated preamble." Specifically, he

testified that the discussion of "information of the signature and the preamble" in the '373 Patent provided sufficient written description support for receiving a "dedicated preamble."

Dr. Mahon did not rebut or contradict Dr. Laneman's testimony that the Korean Application was not coextensive with the U.S. Patents. Further, Samsung left Dr. Laneman's analysis of the '373 Patent largely unrebutted and unaddressed. Accordingly, a reasonable juror could have found that Samsung failed to meet its clear and convincing burden to prove that the '679 Patent lacked sufficient written description support for the "dedicated preamble" limitation.

The Court is also not persuaded that Mr. Jones made a "clear and unequivocal" admission that there is no written description support for the "dedicated preamble" limitation. Perhaps the most damaging detail to Samsung's argument is the fact that in both Samsung's Motion and in its reply brief, when it quotes Mr. Jones's "clear and unequivocal" admission, it cuts off the end of his answer, failing to disclose that it is presenting an incomplete quote. Below is the full question and answer.

Q. It is your opinion that a person of ordinary skill in the art would not understand this '679 Patent specification to disclose an embodiment where the target base station sends to the source base station the full dedicated preamble and then the source base station sends the dedicated preamble to the phone. Correct?

A. Correct. And as I answered, my interpretation of the specification is that I don't really think it is disclosed in the sense it makes no sense to me.

(Dkt. No. 286 at 306:17-307:9.) Samsung omits the text emphasized above from both of its briefs. It is difficult to reconcile Samsung's omission of Mr. Jones's full and complete answer with its argument that this is a "clear and unequivocal" admission. Further, immediately after counsel for Samsung forced this alleged "clear and unequivocal" admission, counsel continued to attempt to commit Mr. Jones to agree with counsel's statements more clearly and unequivocally. However, Mr. Jones did not so clearly agree with counsel's questions:

- Q. It is your opinion that a person of ordinary skill in the art would not understand this '679 Patent specification to disclose an embodiment where the target base station sends to the source base station the full dedicated preamble and then the source base station sends the dedicated preamble to the phone. Correct?
- A. Correct. And as I answered, my interpretation of the specification is that I don't really think it is disclosed in the sense it makes no sense to me.
- Q. Right. To you what's described in option one in the claims is inefficient. Correct?
- A. It's inefficient from a downlink perspective, yes.
- Q. Right. And can you explain to the jury why option one is inefficient and you didn't find it in the patent specification.
- A. Well, you've asked me two separate questions.

(Dkt. No. 286 at 308:2-19.)

Nonetheless, even if Mr. Jones had made such an admission, as Samsung contends, the jury was still entitled to weigh this evidence against the evidence presented by Dr. Laneman. The jury heard competing evidence and analysis concerning the sufficiency of the disclosure in the parent applications of the '679 Patent. Ultimately, the burden of proof was on Samsung to prove by clear and convincing evidence that these applications did not contain sufficient written description for receiving a dedicated preamble. Given that Dr. Laneman testified that "the specification in the Korean Application is not as extensive as the [U.S.] patent specifications," and given that Dr. Mahon's testimony primarily focused on the Korean Application, a reasonable juror could have found that Samsung did not meet its clear and convincing burden to show a lack of written description support in the U.S. patent applications. Samsung fails to demonstrate that the evidence "points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion." *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018) (citing *Bagby Elevator Co. v. Schindler Elevator Corp.*, 609 F.3d 768, 73 (5th Cir. 2010)).

2. "Index of the Dedicated Preamble"

Samsung argues that neither the '679 Patent or any of its priority disclosures provide written description support for "an index of the dedicated preamble," and that no reasonable juror could have found that the '679 Patent was not invalid for lack of written description. (Dkt. No. 265 at 9.) To support its argument, Samsung first points to the testimony of its invalidity expert, Dr. Mahon. (*Id.*) At trial, Dr. Mahon first explained that there is no mention of the term "index" in the '679 Patent or any of its priority disclosures, and he opined that "[t]here's no description of . . . the index to the dedicated preamble to support the written description." (Dkt. No. 290 at 158:21-23.)

Samsung contends that Evolved's expert, Dr. Laneman, "testified that the portion of the Korean priority application discussing Figure 5 at page 34 of the Korean priority application and the portion of the '679 Patent discussing Figure 5 at column 3 lines 34 to 44 disclose the claimed index." (Dkt. No. 265 at 10.) However, Samsung argues that this testimony is critically deficient because Dr. Laneman only testified that this disclosure showed that "one of skill in the art would interpret that variable 'I' as an index *of the signatures*." (*See* Dkt. No. 290 at 320:14-23.) According to Samsung, this is not sufficient to show written description support for an index *of a dedicated preamble*. (*Id.* at 10); (Dkt. No. 290 at 320:21-23.) Thus, Samsung contends that Dr. Mahon's testimony was effectively unrebutted and was the only evidence concerning the written description support, or lack thereof, for the "index" limitation at trial. (Dkt. No. 265 at 10.)

Samsung also argues that Dr. Laneman's analysis was improper because he relied on portions of the specification describing prior art. (*Id.*) According to Samsung, Dr. Mahon anticipated this argument and explained how Dr. Laneman would only discuss "something called symbols of a signature," which according to Dr. Mahon "has nothing to do with an index of a dedicated preamble" because it is "an index to a 3G signature that's used in the 3G access." (Dkt.

No. 290 at 155:10-24.) Samsung contends that Dr. Laneman pointed to descriptions of the 3G cellular communication standard, which did not use dedicated preambles, to show written description support for an index of a dedicated preamble. (Dkt. No. 265 at 11.) Samsung further contends that Dr. Laneman admitted that Figure 5 and its corresponding descriptions in the specifications were prior art. (*Id.*)

In response, Evolved contends that Dr. Laneman's testimony would allow a reasonable juror to conclude that Samsung had not met its burden to show that the claims were invalid for lack of written description support for an "index of the dedicated preamble." Specifically, Dr. Laneman explained how the target base station assigns a particular preamble for use in the randomaccess procedure and how it sends necessary information for the mobile device to perform a handover using a dedicated preamble. (Dkt. No. 271 at 9; Dkt. No. 290 at 309:25-310:8, 319:25-320:11.) As with the "dedicated preamble" limitation, Dr. Laneman opined that the "index of the dedicated preamble" was supported by the sections stating, "[t]he Handover Command message may include necessary information which comes from the target eNB, for establishing the radio connection to the target eNB" and "the Handover Command message may include information of the signature and the preamble." (Dkt. No. 292 at 7:19-9:5); JTX-4 at 6:66-7:7. Dr. Laneman also identified disclosure in the specification related to the use of an index to represent larger, complex numbers, testifying that "one of skill in the art would understand this to be a description of an index of those signature sequences." (Id.; Dkt. No. 290 at 320:12-321:20.) Evolved argues that the lack of the exact words "index of a dedicated preamble" from the specification is not dispositive. (Dkt. No. 271 at 10.) Accordingly, Evolved argues that there was ample evidence in the record upon which the jury could have found that the "index" limitation was adequately supported by the written description.

Evolved argues that there is nothing improper in Dr. Laneman relying on portions of the specification describing prior art. (*Id.*) (citing *Bos. Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1366 (Fed. Cir. 2011)). Evolved contends that it has consistently maintained that the key inventive aspect of the '679 Patent is the assigning of preamble by the target base station and the use of the assigned (dedicated) preamble in the random-access procedure. (*Id.*) According to Evolved, it has never argued that using an "index" to represent the full preamble is the inventive aspect of the '679 Patent. (*Id.*) Rather, Evolved contends that using an "index" to represent complex numbers, such as a preamble, is a concept in the prior art and is something that a POSITA would already have understood could be done. According to Evolved, Dr. Laneman points to sections of the specification describing indices not to describe the invention (i.e., the use of a "dedicated" preamble), but rather to support his assertion that a POSITA would have understood that large and complex numbers could be represented by indices and would have understood the disclosure pertaining to "information" to support an "index of a dedicated preamble."

In reply, Samsung argues that Evolved fails to rebut Samsung's argument that Dr. Laneman's testimony was directed towards the disclosure of an index *generally*, and not to the disclosure of an "index of the dedicated preamble" *specifically*. (Dkt. No. 277 at 4.) Samsung contends that Evolved is unable to point to any record evidence supporting written description of the claimed concept of an "index of a dedicated preamble," and Dr. Mahon's opinion of no written description was unrefuted on the record.

In sur-reply, Evolved argues that Dr. Laneman testified that a POSITA would understand that "information" related to the preamble as described in the '373 Patent specification, could be an index based on the patent's disclosure of indices to represent large and complex numbers. He testified that "one of skill in the art would understand this to be a description of an index of those

signature sequences." (Dkt. No. 290 at 320:12–321:20.) Accordingly, Evolved argues that Dr. Laneman did testify that the specification specifically supported an "index of a dedicated preamble," not just indices generally.

The Court agrees with Evolved. As the Court instructed the jury, "written description does not have to be in the exact words of the claim." (Dkt. No. 293 at 52:7-12.) The fact that the words "index of a dedicated preamble" do not appear explicitly in the patent does not mean that there is no written description support for the claim element. As with the "dedicated preamble" element, Dr. Laneman testified that a POSITA would recognize the discussion of "information" in the disclosure as describing both a dedicated preamble or an index of a dedicated preamble:

A. The source -- and, again, in the description of the process, the source eNodeB sends a handover command message to the mobile device, and that's received by the mobile device, and that contains information of the signature and the preamble which are used for access by the mobile device.

Q. And so when it describes the information could that be either a dedicated preamble or an index?

A. Yes.

Q. Based on this description, do you find that there is adequate description of the receipt of both dedicated preamble and the index of the dedicated preamble?

A. Yes.

(Dkt. No. 292 at 7:19–9:5); JTX-4 at 6:66–7:7. As further support for this opinion, Dr. Laneman identified sections of the disclosure where indices are used to represent other numbers, testifying that "one of skill in the art would understand this to be a description of an index of those signature sequences." (Dkt. No. 290 at 320:12–321:20.)

The Court is not persuaded that all of Dr. Laneman's testimony was exclusively "directed towards the disclosure of an index generally, and not the disclosure of an 'index of a dedicated preamble' specifically." (Dkt. No. 277 at 4.) Dr. Laneman testified that an index of a dedicated

preamble was specifically supported by the sections of the specification stating "[t]he Handover Command message may include necessary information which comes from the target eNB, for establishing the radio connection to the target eNB" and "the Handover Command message may include information of the signature and the preamble." (Dkt. No. 292 at 7:19-9:5); JTX-4 at 6:66-7:7. Dr. Laneman's discussion of indices generally supported his analysis that a POSITA would have understood "information" in these sections to describe an index of a dedicated preamble. (*Id.*) Dr. Laneman pointed to sections of the patent describing prior art to opine that a POSITA would understand that large and complex numbers could be represented by indices. Understanding such to be the case, Dr. Laneman opined that a POSITA would understand that the "information," in the context of the sections supporting the claims, could refer to an index for a dedicated preamble.

The Court is not persuaded that it was improper for Dr. Laneman to point to sections of the specification concerning prior art to support his written description analysis. "[b]ecause the specification is viewed from the perspective of one of skill, in some circumstances, a patentee may rely on information that is 'well-known in the art' for purposes of meeting the written description requirement." *Bos. Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1366 (Fed. Cir. 2011). Dr. Laneman did not opine that these prior art sections themselves provide the written description support for the invention. Rather, Dr. Laneman testified that these sections support the conclusion that a POSITA would understand that large and complex numbers could be represented by indices, and a POSITA would have read the sections concerning "information" to be sufficiently describing either a whole preamble or an index of a dedicated preamble as a result.

The jury was entitled to weigh the competing testimony of Dr. Laneman and Dr. Mahon. Samsung fails to demonstrate that the evidence points so overwhelmingly in its favor that the jury's

verdict should be set aside. Accordingly, the Court finds that Judgment as a Matter of Law of lack of written description under 35 U.S.C. § 112 is not warranted under these circumstances.

B. Novelty

Samsung contends that it established, by clear and convincing evidence, that claims 1, 3, 6, and 8 of the '679 Patent are invalid under 35 U.S.C. § 102. (Dkt. No. 265 at 12.) Specifically, Samsung argues that U.S. Patent No. 8,131,295 ("Wang") anticipates the asserted claims of the '679 Patent.

Samsung contends that no reasonable juror could have found that Wang did not anticipate the asserted claims of the '679 Patent. As a preliminary matter, Samsung relied on Wang's provisional application (the "Wang Provisional") to predate the '679 Patent and thus was required to show that the Wang Provisional conveys to one of skill in the art that the inventor possessed the subject matter of at least one of the claims at issue. Samsung contends that it presented unrebutted testimony establishing such. (Dkt. No. 265.) Specifically, Samsung argues that Dr. Mahon presented evidence that claim 1 of Wang was fully supported by the disclosure in the Wang Provisional, addressing where each element was disclosed and described in the provisional application. Samsung contends that Evolved never challenged Dr. Mahon on this analysis, and Dr. Laneman never testified as to whether Wang qualified as prior art.

Evolved does not rebut this argument in its response brief or argue that Wang does not qualify as prior art. The Court agrees with Samsung that there is no issue that Wang qualifies as prior art based on the Wang Provisional.

Concerning the merits of Wang, Samsung argues that it established by clear and convincing evidence that every element of claims 1, 3, 6, and 8 of the '679 Patent were disclosed in the Wang reference. (Dkt. No. 265 at 12.) Samsung contends that Evolved and its expert, Dr. Laneman, did not dispute a majority of Dr. Mahon's testimony, and instead only contested that Wang did not

disclose the following elements: (1) the "dedicated preamble" limitation found in claims 1 and 6, (2) "receiving a random access response in response to the transmitted dedicated preamble" found in claims 1 and 6, and (3) "the preamble information is signaled via a handover command generated by a target base station" found in claims 3 and 8. (*Id.* at 13-14.)

Samsung argues that Dr. Laneman failed to address and refute evidence and points raised by Dr. Mahon. For example, Samsung points out that Wang discloses

A *particular (dedicated) RACH preamble* signature may be reserved for the handover purpose to indicate that the sender is a handover WTRU, (i.e., a WTRU undergoing a handover process). This *dedicated RACH preamble* signature is indicated in the handover command.

(*Id.* at 14 (citing JTX-35 at 4:64-5:1 (emphasis added)).) Samsung acknowledges that "Dr. Laneman claimed that this was not a disclosure of preambles being dedicated to a specific terminal as required by the claims, but rather a description of dedicating preambles for the handover operation generally." (*Id.*) However, Samsung argues that Dr. Mahon "pre-butted" this opinion by explaining that the dedicated preamble disclosed in Wang "is indicated in the handover command" just like in the '679 patent claims; that Wang, at JTX-35 column at 3:42 to 64, further teaches determining "whether random or dedicated access signature was sent, meaning Wang is disclosing that there's a difference between random access and dedicated access;" and that Wang was discussing a system to improve delays in the handover procedure which can be achieved using a zero collision (dedicated preamble) process. (Dkt. No. 265 at 14-15; Dkt. No. 290 at 146:10-147:13, 147:21-148:5.) Also, Samsung contends that Dr. Laneman's own testimony refutes his conclusions since he admitted on cross examination that Wang discloses "something more than conventional random access handover procedures using a contention-based system (i.e. non-dedicated preambles)." (Dkt. No. 265 at 15.)

Samsung also concedes that Dr. Laneman testified that "receiving a random access response in response to the transmitted dedicated preamble" was not taught by Wang because there were intermediate steps between the mobile device sending the preamble and receiving the uplink resource assignment. (*Id.* at 16.) However, Samsung contends that this argument adds a requirement not found in the claim language. (*Id.*)

Lastly, Samsung contends that it presented clear and convincing evidence that Wang discloses the limitation "the preamble information is signaled via a handover command generated by a target base station." Specifically, Samsung contends that Dr. Mahon explained that a person of ordinary skill in the art would understand that Wang discloses all handover information coming from the target base station, refuting Dr. Laneman's claims that Wang only disclosed the handover coming from the source based station. (*Id.* at 16.)

In response, Evolved argues that Dr. Laneman explained in detail why Wang did not disclose a "dedicated preamble" according to the '679 Patent—*i.e.*, a preamble dedicated for use by a single mobile terminal during handover—but rather disclosed a preamble reserved generally for the purpose of handover. (Dkt. No. 271 at 11.)

Evolved argues that Dr. Laneman did not admit that the "handover reseponse/handover command operation disclosed in Wang was identical to how the '679 patent itself described the same operation" as Samsung contends. (*Id.* at 12 (citing Dkt. No. 265 at 17).) In fact, Evolved notes that Dr. Laneman criticizes Dr. Mahon for simply assuming that because the source base station sends the preamble information, it must originate at the target base station. (*Id.*) Evolved argues that Dr. Laneman's "admission" that Wang teaches more than a standard random-access handover procedure does not inherently mean that it must teach the invention claimed in the '679 Patent. (*Id.*)

Finally, according to Evolved, Dr. Laneman compared the primary figures in Wang and in the '679 Patent and opined that the procedures were different, and, thus, Wang was not "arranged as required by the claim." (*Id.* (quoting Dkt. No. 292 at 38:14–41:7.)) Evolved argues that the jury was entitled to credit Dr. Lanman's testimony and find that Samsung failed to carry its clear and convincing burden.

The Court agrees with Evolved. For each of the three contested elements, Samsung acknowledges that the parties presented competing expert testimony for the jury to consider. Although Samsung may disagree with Dr. Laneman's opinions and point out that Dr. Mahon provided counter-analysis, Samsung does not point to anything in Dr. Laneman's testimony that was so deficient that the jury was required to disregard it and accept Dr. Mahon's analysis. For example, Samsung's assertion that Dr. Laneman "admitted" that Wang discloses a handover different from a conventional RACH handover procedure does not mean that Dr. Laneman conceded that Wang discloses the exact handover procedure of the '679 Patent. Dr. Laneman opined that Wang was distinguishable from the patented invention and the jury was entitled to consider and credit that testimony.

Samsung bore the burden to prove by clear and convincing evidence that the Wang reference anticipated the asserted claims of the '679 Patent. However, there is sufficient evidence in the record that the jury was entitled to consider that could lead to a finding that Samsung did not carry its burden. Accordingly, the Court finds that Judgment as a Matter of Law that Wang anticipates the asserted claims of the '679 Patent is not warranted under these facts and circumstances.

C. Obviousness

Samsung contends that it established, by clear and convincing evidence, that claims 1, 3, 6, and 8 of the '679 Patent are invalid under 35 U.S.C. § 103. (Dkt. No. 265 at 12.) Specifically,

Samsung argues that the Asserted Claims are obvious in view of the combination of U.S. Patent No. 7,664,076 ("Kim") and R2-061135 submitted at 3GPP TSG-RAN WG2 Meeting #53 ("Nokia").

Dr. Mahon explained how Kim disclosed (1) a wireless communication system where a mobile device would receive preamble information generated by the network and sent to the mobile device via dedicated signaling in downlink, (2) that the preamble information was an index of a dedicated preamble that would be used to perform a random access channel procedure, and (3) that the dedicated preamble would be sent back to the network in uplink and the network would respond with a random access response. (Dkt. No. 265 at 18.) Samsung also contends that Dr. Mahon explained how Nokia disclosed (1) that the random access response would include the uplink grant and (2) that the mobile device would transmit the uplink data using the uplink grant. (*Id.*) Further, Samsung argues that Dr. Mahon provided detailed analysis for why a person of ordinary skill in the art would have been motivated to combine Kim and Nokia, including because the two references are in the same field and that there is a reasonably high expectation of success in making the combination. (*Id.*) Finally, in its brief, Samsung also provides a claim chart demonstrating how Dr. Mahon demonstrated that each element of the asserted claims are disclosed by Kim and Nokia. (*Id.* at 18-19.)

Evolved's expert's rebuttal opinions that were presented to the jury at trial. Instead, in its brief, Samsung provides little more than a claim chart reciting its own expert's testimony. (Dkt. No. 271 at 13.) Evolved contends that Dr. Laneman provided detailed analysis of Nokia and Kim, explaining why they failed to render the claims obvious. (*Id.*) For example, Evolved notes that Dr. Laneman explained that Nokia taught a conventional, contention-based RACH procedure, which

is contrary to Dr. Mahon's opinion that Nokia's RACH procedure was contention-free. (*Id.*) Dr. Laneman also testified that Nokia teaches away from the invention described and claimed in the '679 Patent. (Dkt. No. 292 at 33:7–15.)

Further, Evolved contends that Dr. Mahon admitted during cross-examination that Nokia was "ambiguous" as to its teachings and that the jury was entitled to consider such in determining the credibility of Dr. Mahon's analysis. Evolved argues that a reasonable juror could have concluded that Samsung fell short of its clear and convincing burden given Dr. Mahon's admission that the Nokia reference was ambiguous. (Dkt. No. 271 at 13-14; Dkt. No. 290 at 199:4–21.) Evolved also notes that Dr. Laneman explained that the preambles in Kim are not dedicated for use by a particular mobile terminal, and in fact that the preamble in Kim cannot be reserved for a particular mobile terminal at least because it is based in part on a random number selected by the mobile device.

In reply, Samsung does not address the substance of Evolved's arguments or explain why the jury should have disregarded Dr. Laneman's testimony. Instead, Samsung argues that Evolved "failed to respond under the proper standard—the Court should evaluate the ultimate question of obviousness de novo—and under the proper standard Samsung presented clear and convincing evidence of invalidity." (Dkt. No. 277 at 5.) Samsung does not provide any argument concerning obviousness in its reply brief beyond this single statement.

In sur-reply, Evolved argues that Samsung "does not address the substantive points made in Evolved's response at all" and "ignores Dr. Mahon's admission that *Nokia* is ambiguous." (Dkt. No. 280 at 5.) Evolved also argues that "Samsung claims that Evolved failed to respond under the proper standard but does not explain how." (*Id.*)

The Court agrees with Evolved. As with the previous issues, the jury heard competing testimony from Dr. Laneman and Dr. Mahon. Notably, Samsung does not address Dr. Laneman's testimony concerning Nokia and Kim in either of its briefs. Further, Samsung does not explain how Evolved failed to apply the proper legal standard to its arguments. While "obviousness is a question of law," it is "based on underlying findings of fact," and those findings of fact should be reviewed under the "no reasonable juror" test. W. Union Co. v. MoneyGram Payment Sys., Inc., 626 F.3d 1361, 1369 (Fed. Cir. 2010). "[T]he scope and content of the prior art" and "the differences between the prior art and the claims at issue" are underlying factual inquiries. Id.

Samsung does not refute that Dr. Laneman opined that Nokia and Kim did not render the patent obvious. A reasonable juror could have credited Dr. Laneman's testimony over Dr. Mahon and found that Nokia or Kim failed to disclose certain elements of the asserted claims or that a person of ordinary skill would not be motivated to combine the references.

Accordingly, Samsung has not shown that it is entitled to Judgment as a Matter of Law that the claims are obvious in view of Nokia and Kim.

IV. CONCLUSION

For the foregoing reasons, the Court finds that the Motion (Dkt. No. 265) should be and hereby is **DENIED**.

So Ordered this

Jul 16, 2024

RODNEY GILSTRAP

UNITED STATES DISTRICT JUDGE